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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,782	04/20/2001	Inaki Eizmendi	53807-00008USPT	2003

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EXAMINER

TRAN, CON P

ART UNIT	PAPER NUMBER
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2644

12

DATE MAILED: 04/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/839,782

Applicant(s)

EIZMENDI, INAKI

Examiner

Con P. Tran

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4.7.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. Figures 2 and 3 (see Specification, page 1, lines 16-17; page 7, line 4) should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

2. Claim 6 is objected to because of the following informalities: Claim 6 states "The method of Claim 6" which is depended on itself. Based on phrase "the analog circuit", examiner interprets Claim 6 as a dependent claim of Claim 2. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Todter et al. U.S. Patent 5,862,234 (hereinafter, "Todter") in view of Admitted Prior Art, Back Ground of the Invention (hereinafter, "Admission").

Regarding **claim 1**, Todter teaches a method of reducing noise in a communication device (see Fig. 2, and respective portions of the specification) comprising the steps of: generating an acoustic output in a bilateral transducer circuit (16, Fig. 2), which would vibrate as a buzzer circuit; and applying the generated output to the communication device, wherein the generated output is opposite to the noise generated in the communication device and equal in magnitude (col. 3, lines 2-33). However, Todter does not explicitly disclose the noise resulting from a non-constant current. Admission teaches in order to drive the buzzer to result in a ring, the current through the inductor (210, Figure 2) cannot be constant (page 2, lines 5-6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the Admission teaching with Todter for purpose of providing noise attenuation without the need to use a microphone, as suggested by Todter in column 1, lines 29-30.

Regarding **claim 2**, Todter teaches a method of reducing noise in a communication device (see Fig. 2, and respective portions of the specification) comprising the steps of: generating an acoustic output in a bilateral transducer circuit (16, Fig. 2), which would vibrate as a buzzer circuit; and applying the generated output

Art Unit: 2644

to the communication device, wherein the generated output is opposite to the noise generated in the communication device and equal in magnitude (col. 3, lines 2-33), and the acoustic output is generated from an analog circuit (i.e., speaker, Fig. 2). However, Todter does not explicitly disclose the noise resulting from a non-constant current. Admission teaches in order to drive the buzzer to result in a ring, the current through the inductor (210, Figure 2) cannot be constant (page 2, lines 5-6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the Admission teaching with Todter for purpose of providing noise attenuation without the need to use a microphone, as suggested by Todter in column 1, lines 29-30.

Regarding **claim 3**, Todter in view of Admission also teaches the method of claim 2, wherein the noise is generated in a buzzer circuit (Admission, Fig. 2, page 1, lines 16-18).

Regarding **claim 4**, Todter in view of Admission further teaches the method of claim 3, wherein the buzzer circuit comprises an inductive element (210) generating a magnetic field as a result of a non-constant driving current (Admission, Fig. 2, page 1, lines 16-18).

Regarding **claim 5**, Todter in view of Admission further teaches the method of claim 4, wherein the magnetic field moves a magnetic material impacting a plate-like element to generate an audible sound (Admission, Specification, page 1, lines 18-19).

Regarding **claim 6**, Todter in view of Admission further teaches the method of claim 2, wherein the analog circuit comprises a voltage source and a plurality of impedance components (Admission, VBATT, R651, V605, V606, Fig. 3).

Regarding **claim 7**, Todter in view of Admission further teaches the method of claim 6, wherein the impedance elements comprise at least a resistor (Admission, R651, Fig. 3) and a capacitor (Todter, capacitive electrodes, col. 4, lines 12-18).

5. **Claims 8-9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Todter et al. U.S. Patent 5,862,234 (hereinafter, "Todter") in view of Admitted Prior Art, Back Ground of the Invention (hereinafter, "Admission"), and further in view of Weisigk et al (hereinafter, "Weisigk").

Regarding **claim 8**, Todter in view of Admission teaches the method of claim 7. However, Todter in view of Admission does not explicitly disclose wherein the at least one resistor is in series with the at least one capacitor.

Weisigk teaches an apparatus for feeding and controlling ringing currents in which a resistor R2 is in series with a capacitor C1 (Fig. 1, col. 2, line 65 – col. 3, line 6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the apparatus of Weisigk teaching with the method of Admission, Todter in combination for purpose of providing discharge of ringing circuit capacitors over the switching element, as suggested by Weisigk in column 1, lines 48-50.

Regarding **claim 9**, Weisigk further teaches wherein the capacitor facilitates a non-constant current corresponding to the non-constant current (a discharging current, col. 5, lines 22-32, and lines 49-60; Fig. 3).

6. **Claim 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Todter et al. U.S. Patent 5,862,234 (hereinafter, "Todter") in view of Admitted Prior Art, Back Ground of the Invention (hereinafter, "Admission"), and further in view of daSilva U.S. Patent 6,445,937.

Regarding **claim 1**, Todter teaches a method of reducing noise in a communication device (see Fig. 2, and respective portions of the specification) comprising the steps of: generating an acoustic output in a bilateral transducer circuit (16, Fig. 2), which would vibrate as a buzzer circuit; and applying the generated output

Art Unit: 2644

to the communication device, wherein the generated output is opposite to the noise generated in the communication device and equal in magnitude (col. 3, lines 2-33).

Todter does not explicitly disclose the noise resulting from a non-constant current. Admission teaches in order to drive the buzzer to result in a ring, the current through the inductor (210, Figure 2) cannot be constant (page 2, lines 5-6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the Admission teaching with Todter for purpose of providing noise attenuation without the need to use a microphone, as suggested by Todter in column 1, lines 29-30.

However, Todter in view of Admission does not explicitly disclose wherein the acoustic output is generated from an algorithm programmed into a power management application specific integrated circuit (ASIC). daSilva teaches a method for mobile phone power management which may be incorporated into a application specific integrated circuit using software (ASIC, col. 2, lines 29-41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the method of daSilva teaching with the method of Admission, Todter in combination for purpose of providing extended battery life, as suggested by daSilva in column 2, line 20.

Art Unit: 2644

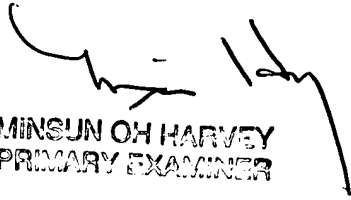
**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Con P. Tran, whose telephone number is (703) 305-2341. The examiner can normally be reached on M - F (8:30 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service Office at telephone number (703) 306-0377.

cpt CPJ  
April 5, 2004

  
MINSUN OH HARVEY  
PRIMARY EXAMINER